PICTURE OF THE MONTH

Satellite photographs of oceanic areas at lower latitudes often reveal a bright, narrow, rope-like line preceding a cold front. Frequently this thin line is separated from the main frontal band at intervals by holes or zones of greatly reduced cloudiness. The TIROS IX photograph of February 25, 1965 (fig. 1) presents a fine example, showing the main frontal band (A) separated from the typical rope-like line (B) by holes such as at C. Although this phenomenon occurs mostly over data-sparse oceanic regions, a few cases are documented by radar observations. Results show the narrow lines to be convective clouds with tops ranging in general from 15,000 to 30,000 ft. "Unlike the squall lines of the Middle West the weather does not appear to be severe. Light showers and thunderstorms occur but nothing unusual has appeared." [1]

The radarscope pictures (fig. 2) show a narrow band oriented 038°–218° crossing Key West, Fla., shortly after 1000 GMT, February 25, 1965, moving from 310° at 22 kt. The Miami radar observations indicate passage at 1140 GMT of a line of showers and thundershowers 5 to 10 mi. wide and more than 300 mi. long, oriented 035°–215°, moving from 300° at about 20 kt. The orientation and movement of these lines are in excellent agreement with the position of the rope-like line in the satellite picture taken at 1753 GMT.

Both Miami and Key West observers reported rain showers and thundershowers, and cloud tops ranging from 18,000 to 30,000 ft. along the narrow line.

[1] L. F. Whitney, Unpublished Manuscript, December 31, 1965.

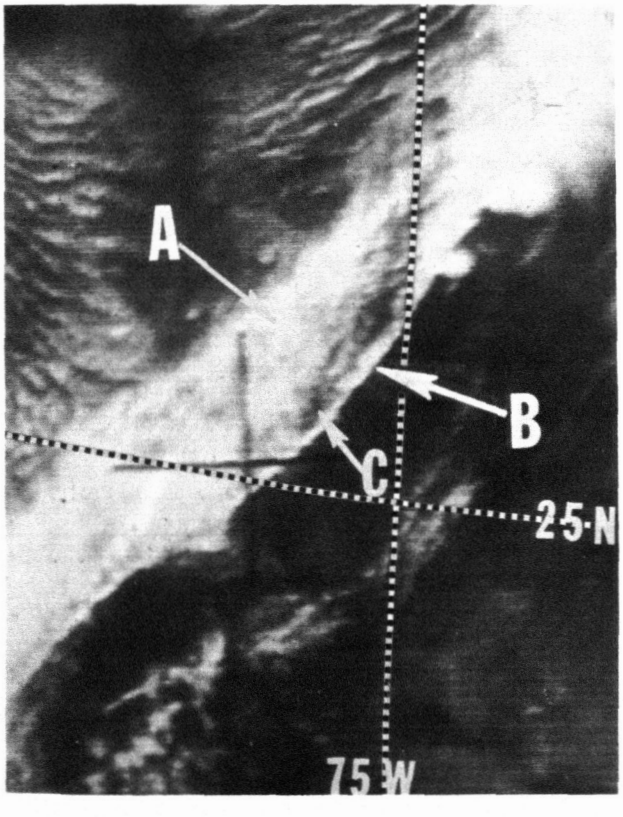

FIGURE 1.—TIROS IX photograph, 1753 GMT, February 25, 1965.

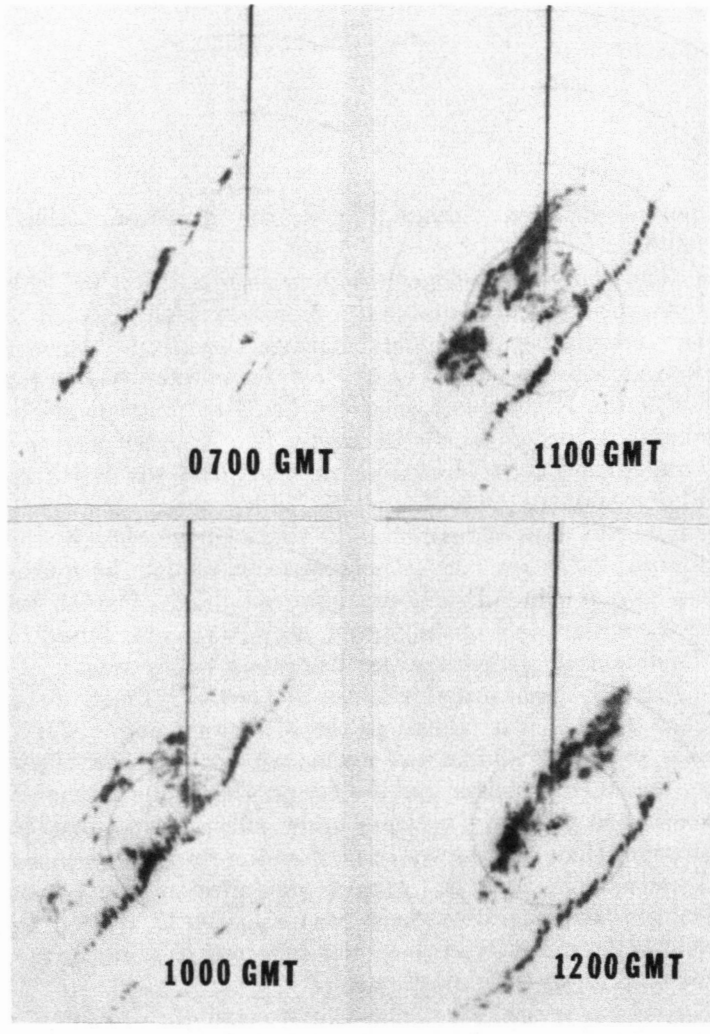

FIGURE 2.—Radarscope pictures taken at Key West, Fla., at 0700, 1000, 1100, and 1200 GMT, February 25, 1965.

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